

IMPROVED BASE STRUCTURE FOR MODULAR ABOVE GROUND SWIMMING POOLS

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to an improved base structure
5 for modular above ground swimming pools. More specifically, the
present invention relates to an improved base structure which
provides a groove in a bottom track member which is substantially
elevated above a supporting surface upon which said track member
is placed thereby elevating side wall panels of the swimming pool
10 and increasing the depth of the pool.

2. Prior Art

A variety of modular swimming pools are known in the art.
Such systems typically utilize arcuate bottom track members in
combination with some form of upright column members to form a
15 circular or oval perimeter for the swimming pool. Side wall
panels are typically supported by a groove in the bottom track
members and such panels typically rest on or only a fraction of
an inch (typically approximately 1/4 inch) above the ground which
supports the track member. One such prior art system is shown in
20 Figure 1.

SUMMARY OF THE INVENTION

The present invention an improved base structure for modular
above ground swimming pools by providing an arcuate bottom track
member, said bottom track member having a bottom surface, a top
25 surface, an inner wall portion, an outer wall portion and a pair
of end portions, said inner wall portion having a groove formed
therein, said groove having a groove bottom which is located in a

plane which is substantially elevated from said bottom surface,
said groove adapted to receive a bottom end of a side wall panel
of a swimming pool in a manner whereby said bottom end of said
side wall panel will be substantially elevated above a supporting
5 surface upon which said bottom surface of said track member is
placed.

Preferably, said groove is provided at a location
approximately halfway between said bottom surface and said top
surface of said bottom track member.

10 Preferably, said bottom track member has a height of
approximately 5 inches and said bottom of said groove is located
approximately 2 inches from said bottom surface. To be
effective, said bottom of said groove is preferably located at
least $\frac{1}{2}$ inch above said bottom surface and said groove has a
15 depth of approximately $\frac{1}{2}$ inch.

Preferably, said inner surface has a lower portion located
below said groove and an upper portion located above said groove
wherein said upper portion is generally vertical and said lower
portion slopes outwardly at an angle of approximately 15 degrees.

20 The base structure preferably includes a plurality of spaced
apart base members and a plurality of arcuate bottom track
members, each bottom track member being connected between a pair
of spaced apart base members to form a base perimeter of the
pool, said bottom track rail members each having a groove formed
25 therein, said groove having a bottom which is located in a plane
which is substantially elevated from a supporting surface upon

which said bottom track members are supported, each said groove adapted to receive and support a lower end portion of a side wall panel of the swimming pool. Said base members also preferably each have a groove formed therein, said groove having a bottom which is located in a plane which is substantially elevated from a supporting surface upon which said base members are supported.

Preferably said base members support vertical columns of the swimming pool structure and said bottom track member and said base members removably interlock with one another.

Applicant also provides an improved base structure for modular above ground swimming pools of the type having a plurality of base members adapted to receive and support vertical support members, vertical support member positioned at opposite ends of side panels of the swimming pool and a plurality of bottom track members, each bottom track member being connected between a pair of spaced apart base members to form a base perimeter of the pool, the improvement comprising: said bottom track members each having a groove formed therein, said groove having a bottom which is located in a plane which is substantially elevated from a supporting surface upon which said base members and said rail members are supported, each said groove adapted to receive and support a lower end portion of a side panel of the swimming pool at a location substantially elevated from said supporting surface whereby the pool has a depth greater than the height of said side panels.

The present invention provides an effective and safe structure to support metal wall members of the modular swimming pool well above (at least $\frac{1}{2}$ inch and preferably 2 or more inches) the ground. This reduces corrosion of the metal wall panels from ground water and protects the metal wall from damage from weed eating or stone landscaping around the base of the swimming pool.

By way of example, the present invention is generally used with 48 inch or 52 inch high metal wall panels and, because the bottom of the wall panel is preferably supported 2 inches above the ground level but the pool liner still rests upon the ground level, the overall depth from the ground to the top of the wall members is increased by 2 inches and the water in such pool may be filled 2 inches deeper without the cost of fabricating a taller wall member upon which greater water forces would be placed.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is an isometric view of a prior art bottom track member.

Figure 2 is an isometric view of the prior art bottom track member of Figure 1 as supporting a metal wall panel.

Figure 3 is an isometric view of a bottom track member according to the present invention showing an inner surface.

Figure 4 is an isometric view of the bottom track member of Figure 3 showing an outer surface and as supporting a metal wall panel.

Figure 5 is a perspective view of a base member according to the present invention.

Figure 6 is a perspective view showing a pair of bottom track members as connected by a base member and showing a portion of a vertical column.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to the Figures 1 and 2, a prior art arcuate bottom track member 10 is shown. A groove 12 is provided in a top surface 14 which is adapted to receive a metal wall panel 20 of the pool. A bottom end 22 of the wall panel rests upon the upper surface 16 of a bottom wall 15 of the track member 10. The lower surface 18 of the bottom wall 15 rests upon the ground or other supporting surface for the pool. As can be seen in Figure 2, the bottom end 22 of the wall panel 20 is positioned above the ground level only by a distance equal to the thickness of bottom wall 15 (i.e. the distance between upper surface 16 and lower surface 18) which is typically only approximately 1/4 of an inch. The side wall 19 of the track member 10 is typically less than 1 inch high. Because of this design, the lower end 22 of the wall panel 20 is positioned practically at ground level and is subject to corrosion from ground water and the like and damage from weed eating or other activities occurring around the base perimeter of the pool.

Referring to Figures 3 and 4, the plastic arcuate track member 30 of the present invention has bottom surface 40, a top surface 50, an inner surface 60, an outer surface 80 and opposite

end portions 90 and 100. A groove 70 is provided on the inner surface 60 approximately half way between the top surface 50 and the bottom surface 40. An upper portion 64 of the inner surface 60 lies above the groove 70 and a lower portion 62 of the inner surface 60 lies below the groove 70. The upper portion 64 is generally vertical and the lower portion 62 slope outwardly at an angle of approximately 15 degrees thus aiding in making the bottom surface thicker than the top surface 50.

The groove 70 has a top portion 72 and a groove bottom 74 thus forming a groove having a depth which is preferably less than 1/2 of an inch. The groove bottom 74 is located at least one inch above and preferably approximately two or more inches above the bottom surface 40 which rests upon the ground or other supporting surface for the pool. Thus, the groove bottom 74 lies in a plane which is substantially above the plane in which bottom surface 40 lies.

As shown in Figure 4, a lower end 122 of a metal side wall panel 120 for the pool rests in and is supported in said groove 70.

Referring to Figure 5 a plastic base member 200 is shown which has a top surface 250 and a bottom surface 200 (which rests upon the ground), an inner surface 260, outer surface 280, and opposite ends 290 and 299. The top surface has a frusto-conical projection 252 with flat edge portion 253 which is adapted to be received by a corresponding opening in the base of a column member 300 (Figure 6) to removably hold and properly position

said column member 300 in place on top of base member 200. End 299 has a recess 292 adapted to removably receive projection 92 of end portion 90 of track member 30 (Figure 3). A groove 270 is provided on inner surface 260 of base member 200. Groove 270 has a top portion 272 and groove bottom 274.

As shown in Figure 6 opposite ends 90 and 100 of the track members 30 are received into recesses in ends portions 299 and 290 of base member 200, respectively, as shown to create a base perimeter for the swimming pool. Plastic column members 300 are placed on top of base members 200 as shown. Figure 6 also shows that track member groove 70 and base member groove 270 are provided at the same distance above the ground so that wall panels 120 may be placed on and supported by both the track members 30 and base members 200.

The invention having been disclosed in connection with the foregoing variations and examples, additional variations will now be apparent to persons skilled in the art. The invention is not intended to be limited to the variations specifically mentioned, and accordingly reference should be made to the appended claims rather than the foregoing discussion of preferred examples, to assess the scope of the invention in which exclusive rights are claimed.